A. Introduction

As directed by the Governor and Secretary of the Environment, the Native American Issues Subcommittee is created with the objective of identifying issues and concerns specific to the Native American Tribes that exist within the boundaries of the Tar Creek Superfund project area, in addition to those that may be impacted as a result of the former mining activities that occurred in the area.

The Subcommittee has met several times and represents many of the Tribal governments and interested Native Americans. Tribal governments represented include not only the Quapaw Tribe which hosts most of the mine sites attributed to the Tar Creek Superfund Site area, but also, Tribes such as the Miami, Wyandotte, Seneca-Cayuga, and Eastern Shawnee who may have significant downstream impacts. All tribes in the area and Indian people living in Ottawa and northern Delaware County are potentially impacted by contaminants from the site as they enjoy their cultural practices of hunting, gathering, ceremonial practices, and utilization of natural resources for crafts, medicines and foods. In addition, living within any of the towns in Ottawa County could expose adults and children to contaminants via the use of mine tailings as construction materials.

Scope of Work

The Secretary of the Environment requests that the committee accomplish two tasks and report the findings by certain deadlines. These tasks are as follows:

First Task

Identify issues and concerns specific to Native Americans that are not specifically addressed by the other subcommittees. In addition to the Native Americans that reside within the boundaries of the Tar Creek Superfund site, the subcommittee shall consider the concerns of Native Americans residing in the areas impacted by pollution from the Tar Creek Superfund area (i.e., downstream impacts). Specifically, the impact of the moratorium placed on Chat by the U.S. Bureau of Indian Affairs shall be explored, as well as, any other concerns identified by the subcommittee. **Report Due: May/June 2000.**

Second Task

Outline any state or federal assistance needed to resolve the issues and concerns identified by the subcommittee in its first task. Specifically, the subcommittee shall propose legislative, administrative, and or congressional actions needed to assist tribal organizations in resolving their unique concerns. **Report Due: July/August 2000.**

Issues Identified

This report concerns Task #1. The Subcommittee has identified seven key issues which may or may not be resolved within one of the other Subcommittees formed within the Governor's Tar Creek Task Force. These seven issues include;

Chat Use Policy/BIA Moratorium
Tribal Sovereignty/Jurisdiction
Air Quality
Employment of Native Americans at Site
Downstream Impacts
Funding for Indian Health Service and Tribal CHR Programs
Culturally Significant Foods

B. Background:

Once a lush tall grass prairie and, after destruction of the vast buffalo herds, a productive agricultural area, much of northern Ottawa County now is directly impacted by pollution resulting from mining activities. Importantly, tribal lands bear the burden of much of the pollution. The beginnings of the mining industry on the Tribal lands can be traced to the discovery of lead occurring on or near the surface in present-day southwest Missouri. Initially, this surface lead was used to make, among other things, bullets. Eventually, though, and as the mines in Kansas and Missouri were developed or played out, mining interests pressured the United States to open the Indian lands in present-day Ottawa County to mining. By the end of the 19th century, lead and zinc mining was a booming industry in the so-called "Tri-State" area — the area where the borders of Kansas, Missouri, and Oklahoma meet.

The United States government negotiated mining leases on Indian lands, including those of the Quapaw Tribe. By the early years of the 20th century, and up until 1930's, Ottawa County saw a mining boom, which waned during the depression. Activity intensified again during World War II, for the War effort, and continued until the late 1960's. Although members of the Tribe benefited financially from mining royalties, none obtained significant or long-lasting wealth. The mining interests constantly pressured the United States to maintain low royalty rates on Indian leases, and generally, the boom periods were relatively brief.

The United States made a number of other decisions in administrating the Indian mining leases that have had long-lasting environmental impacts. Each lead and zinc mine generated many hundreds of thousands of tons of mine tailings, including chat and fines, which were usually deposited on the mining

lease itself. These tailings piles — many of which were and are the size of large hills or small mountains — remain to this day on much of the Indian land in Ottawa County. As the mines closed, the operators usually left the tailings piles intact, with the consent of the government. The chat piles have increasingly been identified as the source of serious soil, airborne and water-borne contaminants, including lead, arsenic, and cadmium contamination.

In the years following World War II, the lead and zinc mines in Ottawa County declined and were closed. In the 1960s and 1970s, the operators stopped pumping groundwater out of the closed and abandoned mines. Very quickly, most of the old mines in Ottawa County filled with water. By 1979, the acid mine drainage began spilling out of some mines and into Tar Creek and its tributaries. This mine drainage has been shown to have contaminated the shallow ground water and the surface water with iron, sulfate, zinc, lead, and cadmium.

The government's management of the Tribe's resources has had an economic as well as an environmental impact. For years, the government represented to the Indian royalty owners that they could sell the chat in these piles left on their land, and that the piles represented an economic benefit for current and future generations. In reality, the tailings piles have been of minimal economic benefit to most Tribal members, and to the contrary have resulted in severe environmental and economic impacts. Rock from the tailings piles has sold slowly over the years, the market for it tempered by, among other factors, low prices, processing costs, environmental concerns and transportation costs.

Recently, faced with health concerns about the contents of the chat piles, the BIA placed a moratorium on sales of chat from Indian land. However, sales of chat from non-Indian land has continued unimpeded, thus damaging the markets some members of the Tribe previously had for their product. The obvious inconsistency of how one federal agency prevents the sale of chat on Indian lands (BIA) for environmental reasons while another federal environmental agency (EPA) allows unrestricted sale of the same chat has not gone unnoticed by the Tribal owners.

For the Quapaw Tribes allottees and their heirs, the legacy of the mining industry in Ottawa County — and the government's management of the Tribe's resources — has been a relatively short-term economic supplement and enormous and severe environmental damage. Much of the Indian land in Ottawa County remains beneath chat piles, and on top of flooded abandoned mines that are causing or are greatly contributing to spreading groundwater contamination. Recent studies have shown that some tribal members' water wells have been contaminated, and many others are threatened. Furthermore, the contaminated mine water flowing into Tar Creek and other streams increasingly threatens larger downstream rivers and lakes. Runoff and airborne particles from the chat piles further contribute to the environmental problems. Aside from the environmental impacts, the massive pollution makes the Tar Creek area unattractive from the standpoint of quality of life, and thus hinders economic development possibilities.

EPA estimates that seventy (70) percent of the Tar Creek Superfund Site is on Quapaw Tribal land. The BIA recognizes that sixteen (16) of the largest chat piles are on the Tribe's land. The three major streams in the Quapaw Tribal jurisdiction are recognized to contain high levels of toxic heavy metals in their sediments. Clearly, in the mining district area where mountains of chat, mine tailings, floatation ponds, sink holes, and abandoned debris mark the terrain, the wildlife, birds, and plants important for the subsistence, medicinal, and cultural uses of Tribal members are damaged, if not extinct. Materials, such as buck brush and honeysuckle, used for making baskets, are rarely, if ever found. In 1979, when the acid mine water began pouring onto the surface and into Tar Creek, there occurred a massive fish kill. To this day, there are no fish in Tar Creek. What once was a lush prairie so thick and high that Ottawa County is referred to in many historic accounts as the "hay capital of the world," the site is now reduced to a churned up terrain with abandoned mining areas piled up to two hundred feet with chat and mine tailings, and forty (40) square miles of chat covered surface with very little vegetation.

Over the last two decades, several governmental plans have been announced to address the pollution in the Tar Creek area. All of these projects have been extremely limited in scope, and have not involved any large-scale clean-up and remediation of Indian lands. In addition, these limited federal and state projects have had, at best, very limited results. More importantly, Native American tribes in the area have been left almost entirely out of the planning and implementation of the few governmental remediation projects undertaken in the Tar Creek area. As a result, these programs have failed almost entirely to address Tribal concerns about pollution on Indian lands.

Much of the Quapaw Tribal lands are damaged by abandoned mines. Contamination from these sites impact streams, which flow through the jurisdictions of other Tribes. All Native Americans living in the area are potentially exposed to these contaminants as a result of the widespread use of chat, and as they practice their cultural heritage. Damages include; (1) heavy metals contamination of the much of the surface within the mining district; (2) chat piles and mine tailings piled as much as two hundred feet high, and spread across the surface throughout the district, and, used as loose gravel throughout the County; (3) heavy metal contamination of the stream sediments of Tar Creek, Beaver Creek, and the Neosho and Spring Rivers, as well as upper Grand Lake; (4) damage or extinction of certain plants in the mining district and downstream areas, which are historically utilized by Tribal members for subsistence, medicine, crafts, ceremonial and other cultural uses; (5) damage/and or extinction of birds and mammals utilized by Tribal members for subsistence, medicines, crafts, ceremonial and other cultural uses due to contamination; (6) exposure to Tribal people, potentially affecting their health, from the ingestion of contaminated plants, birds, fish, and mammals exposed to heavy metals in the mining district.

The area's Tribes are working with federal and state agencies to quantify the above mentioned damages. The Tribes desire a full cleanup of the surface in order to insure an end to exposure to heavy metals by the human, plant, fowl, fish, and animal populations. This cleanup will have to include removal of the chat piles and debris around abandoned mine sites. Further, the Tribes are studying the feasibility

of constructed wetlands and other treatment technologies for the treatment of acid mine water, in order to eventually restore the aquatic life in Tar Creek and Beaver Creek, as well as, protect aquatic species in the Neosho and Spring Rivers. As the area is covered with open mine shafts and sink holes, these will also have to be addressed. The Tribes will work to insure that all these issues are addressed in a restoration plan for the area.

C. Chat Use Policy/BIA Moratorium:

Historically chat, or the smaller particles of mine tailings, have been used as gravel throughout the area, and sold to governmental and private concerns across the State and in other states. Chat has been used as base for roads, parking lots, and concrete slabs in new home construction. Although the chat poses a health risk for the area; historically, the chat has become an economically viable commodity. Indian chat owners were promised economic benefits in return for allowing the mining companies to leave their tailing piles on the surface and abandon the sites. Over the years, Quapaw Tribal members relied on the modest incomes derived from chat sales.

In October 1997, the BIA, recognizing the potential liability as a Responsible Party at the Superfund Site, imposed a moratorium on the sale of Indian owned chat. Overnight the market value of non-Indian owned chat increased by as much as three times its value as Indian chat customers began buying from non-Indian chat owners. Since the moratorium began, chat has continued to be sold and spread across the area in a manner, which created the need for the Residential Removal Action, begun by the EPA in 1996.

For Native Americans in the area it is puzzling how one federal agency, recognizing a potential hazard, can impose strict rules on a substance, while another federal agency, especially one charged with the responsibility of protecting human health and the environment, allows the substance to be utilized in a hap-hazard manner. Fortunately, the EPA and the State of Oklahoma have, recently, developed a chat use policy. As of June 1st, the State's chat policy will be enforced with stiff penalty for the worst abusers. **The Subcommittee appreciates this effort by the State and support of the EPA.**

In recent communications with the BIA, it appears that as soon as the BIA is confident that the State's chat policy is being enforced and violations of the policy have ceased, the moratorium on sales of Indian owned chat will be lifted. Although the members of the Native American Issues Subcommittee and most Native Americans in the area, including chat owners, are aware of the hazards associated with the use of chat, we also know that much of the larger grain sizes of chat are commercially viable products, if used in a manner consistent with the State of Oklahoma's chat use policy. It is the desire of the Committee members that the Indian chat owners be allowed, soon, to

begin the removal of the chat piles on Indian lands through the sale and commercial use of the chat, which is suitable for such practice, and the disposal of the hazardous materials in a manner which protect human health and the environment.

The Committee now looks to the EPA, BIA, and the State for leadership on this issue. The Committee requests that the State make every effort to demonstrate its resolve on this policy, and work with us and the BIA to lift the moratorium and develop viable mechanisms for the removal of chat piles from Indian lands. A cooperative effort between the Tribes, EPA, BIA, and the State of Oklahoma could resolve this issue, soon. The Committee recommends that, regardless of how the chat is used (i.e., marketed as a product, or used for remedial purposes), the Indian chat owners deserve fair market value for their chat.

D. Tribal Sovereignty/Jurisdiction:

The Committee is concerned about the Sovereignty of each Tribe involved in the Tar Creek project. Tribal governments enjoy a nation-to-nation relationship with the agencies of the federal government. Tribal involvement at the Tar Creek Site has been practically non-existent until the recent development of environmental departments within most of the Tribes in the area. Whether a Tribe has a formal environmental department or not, each Tribe must be consulted as a concerned and active participant, equal to all other governmental bodies consulted by the agencies of the federal government, in all aspects of the Tar Creek project.

The Tribes wish to work with the State of Oklahoma, and its sub-governments, in a respectful manner, recognizing each government's sovereignty. Field Investigations, Remedial Investigations, Feasibility Studies, and Remedial Designs, should include all governments whose jurisdictions are to be included in the projects at every phase. Impacts to Indian lands, Tribal jurisdictions, will require tribal involvement in the planning, investigative, and remedial phases. In these instances, Tribes should be involved with the EPA in the planning and executing activities, and share findings, workplans, and data with the State agencies involved in parallel efforts on State jurisdiction.

The Committee requests that leaders of all governments involved at the Tar Creek Site hold top level meetings which include top leaders and/or their key personnel in order to maintain lines of communication, insure that they all are informed of the proposals, plans, and work at the site. This will insure that all are equally informed, involved, and that communications are clear.

E. Air Quality:

The Committee is concerned with the possibility of airborne dust from the chat piles, and chat covered lands, containing heavy metals, and potentially affecting human health and the environment in the Site area. Moreover, we are concerned with the possibility that silica dust may be the main contributor to upper respiratory ailments in the Site area. Committee members have seen studies with USGS, which document radioactive elements naturally occurring in Ottawa County, including radon, that may also be contained in the chat. We would also like information relating to naturally occurring asbestos, which may also be contained in the chat piles.

There have never been air studies in the area sufficient to rule out or document these issues. The committee would like to see in depth air studies in the area as soon as possible. The Tribal environmental departments, so far, have been unsuccessful in raising funds for this effort. Perhaps the State of Oklahoma could work with us, and the EPA, in developing studies of these issues.

Future plans made available to the Committee include the following;

TEAL project (OU Health Sciences Center): Part of the new project includes sampling ambient air around and within homes in the Superfund Site area.

Harvard University: Their health study will include sampling air to determine deposition of contaminants in soil at the site.

Quapaw Tribe: The Tribe's Environmental Office will conduct air sampling in the fall to study the content of silica, lead, and cadmium in dust in the Picher/Cardin area.

It is difficult for this Committee to put a cost on a comprehensive study of air quality in the Superfund area. None of the studies mentioned above could be considered comprehensive. Funding sources include, EPA, ATSDR, BIA/Dept. of Interior, and the State of Oklahoma.

F. Employment of Native Americans at the Site:

The Ottawa County area, especially the Superfund area towns, have higher than average, for Oklahoma, Native American populations; yet, there is no preference for hiring Native Americans. Considering 70% of the Superfund Site, according to the EPA, is on Indian lands, we find this appalling. The Committee would like to have a Native American hiring preference for all Superfund related work at the site, as well as, training programs for training Native Americans to qualify for jobs at the Site.

It is difficult for the Committee to establish all the training that will be necessary for the cleanup work and the cost for such training. The State's Vo-Tech facility in Miami and the Inter-Tribal Council could assist with the Training, facility, and funding.

G. Downstream Impacts:

All of the Tribes in the Superfund Site area are potentially impacted by heavy metals in the sediments and water columns of the streams. Periodic flooding may contribute to contamination of riparian zones, as well. These impacts may damage natural resources; such as, aquatic resources, plants, and game harvested from the area. Tribal members hunt, fish, and gather resources within their tribal jurisdictions. They also cross boundaries as they move up and down the streams, and seek productive lands throughout the area. All Native Americans that enjoy the wild areas, and that practice traditional ways, may be impacted from off-site contamination. Even the Quapaw Tribe's jurisdiction is affected by downstream impacts from the Kansas and Missouri portions of the Tri-State Mining District.

The Tribes must, and are now, working together to better understand the impacts to our lands from the off-site migration of contaminants at the Tar Creek Site. Tribal environmental offices are working to raise funds for investigative work leading to data, which will document or alleviate these concerns. Documentation of damages to aquatic life in the Spring River, Neosho River, and Beaver Creek from the Superfund Site area greatly needed. Tribal members consume large amounts of these resources. In addition, documentation of damages to plants and wildlife/game, that subsist off the aquatic resources and/or riparian resources is greatly needed. Traditional practices of hunting and trapping game, harvesting foods and medicines, as well as, resources for ceremonial uses persists in the area. Just as Native Americans have the right to practice their culture, they have the right to be safe in these practices.

Studies need to be conducted to assess the damages to cultural resources in and downstream of the mining area that include the Tribes. Studies being considered include;

State of Oklahoma: ODEQ is proposing a fish study in the Spring and Neosho Rivers. Should start in the fall of this year. They will study fillets and whole fish.

Fish and Wildlife Service (Tulsa): Working on proposal to study whole fish and other aquatic consumable resources, and possibly commonly harvested riparian zone plants.

Quapaw Tribe: Writing a proposal to do a comprehensive study of commonly consumed aquatic life and riparian zone plants. Geared to Tribal use patterns of harvest and consumption. Proposal will be submitted to BIA.

Harvard University: A portion of their health study will include the study of plants that uptake key contaminants at the site.

H. Funding for Indian Health Service and Tribal CHR Programs:

While the State and County Health Departments are being funded from federal sources (i.e., EPA and the Agency for Toxic Substances and Disease Registry (ATSDR), for health education, health studies, and blood lead sampling, the Indian Health Service funds are being cut. Funding is needed for Indian Health Service to acquire blood lead machines (which do not require veinus sticks, and give rapid results) and testing costs, in order to continue valuable long range follow up of children for lead poisoning. Additional staff will also be needed for this effort, as well as, to continue and expand educational outreach and materials.

Indian Health Service will also require Staff to gather Native American statistics from health records at the Service, since the OU2 projects is based on their initial work. In addition, research is needed to investigate their records for other health issues that are too common to our area.

Tribal Community Health program Representatives (CHR), at each Tribe, could be utilized to help educate tribal members and access the Indian Health Service Clinic and their blood lead machines. This would not only insure that all records remain on site at Indian Health Service, but would enhance outreach by the Tribes so that more Native Americans could get tested.

Costs for these recommendations are not known by the Committee. Sources of funding include ATSDR, CDC, HHS, Superfund, and Dept. of Interior.

I. Culturally Significant Foods:

The Committee is concerned about the damage to culturally significant natural resources in the Superfund area and the impacts to such resources downstream of the Site. Given that other Subcommittees are studying impacts to water, soil, groundwater, and land reclamation, this Committee will focus our concerns in this category to the foods Tribal people traditionally rely upon, which may be reduced, extinct, and/or contaminated due to impacts from the Site. Plant and animal resources which are traditionally used for ceremonies or crafts; including, costumes and ceremonial objects, are also important losses, however, food and medicinal resources provide greater potential impacts to human health.

The lists of plants, aquatic, and animal food resources are not complete. We will strive to add to the list as often as our research uncovers other resources. The list is the result of the efforts of the Environmental Departments of the Seneca-Cayuga, Wyandotte, Modoc, Eastern Shawnee, and Quapaw Tribes, in conducting interviews with Tribal members, and especially, with Tribal elders. We will report on food resources, which are reported reduced in numbers, extinct, and/or known or suspected of being contaminated in certain areas. The Committee recognizes that little data is available to substantiate the losses and concerns of our Native American people. In our next Task report we will provide recommendations for studies, which would target these and other aquatic and terrestrial resources for study. In the interim, we ask that appropriate agencies consider these resources, and begin planning research designed to look into our concerns.

Culturally significant food resources of concern to this committee include:

1. Fish: In 1979 when the acid mine water began to flow into Tar Creek, U.S. Fish & Wildlife Service reported a massive fish kill all the way down the stream. Fishing in the Spring and Neosho Rivers has been reduced because of knowledge of contamination from mining, however, many Tribal members rely on fishing for subsistence. Tribal members report, to date, catching fish with sores on them. Some studies were done in the 80's by the State of Oklahoma and Fish & Wildlife Service. What we don't know is the current lead and cadmium content of filets or whole fish. If lead is stored in bone, what is the impact of eating fish cooked whole? Many Tribal members responded that they frequently cook their fish whole.

Other edible aquatic life: Includes crawfish, mussels, and turtles. These are greatly diminished, and, remaining populations may be contaminated. None of these have been studied; however, a recent survey conducted by Tribal environmental staff, shows that Tribal members are consuming these resources from the Beaver Creek, Neosho and Spring Rivers.

2. Edible Plants: Berries and fruit (persimmons, cherries, blackberry, gooseberry, mulberry), herbs (snakeroot, redroot, dogroot, sage), food (onion, garlic, water cress, mushrooms, asparagus, cattails, nettles), and nuts (acorns, hickory, walnut) are greatly diminished, if non-existent in the mining district. They may be found near segments of the Beaver creek, Spring and Neosho Rivers; however, contaminated sediments from chat run-off and acid mine water, during flood events could result in contaminated riparian zone deposits which would impact the quality of these resources downstream of the Superfund Site area. Laboratory analysis of wild onions from the flood zone of Beaver Creek showed high levels of cadmium in the plants. Samples of cattails showed high levels of lead in the roots, mid stem and flower parts. The RI/FS for OU2 showed high levels of lead and cadmium in certain plants raised in contaminated residential soil.

- 3. Game: Squirrel, Rabbit, Deer, Duck, Geese, Quail, and Turkey. These are the most commonly hunted game in the area. Tribal members report greatly diminished populations in the mining district area. We don't know the lead content of game flesh. Even in the parts of Beaver creek and Spring River which are out of direct mining impacts, game drinking the water and feeding on the animal, aquatic life and plants along the streams could be impacted. As with fish, if lead is stored in the bone, what is the impact of consuming game cooked whole?
- 4. **Agricultural Products:** Ottawa County was once known as the "Hay Capital of the World." In the late 1800's (after destruction of the Buffalo herds) hay was the chief income for Indian people in the area, before statehood. In the mining district hay production is limited. We are concerned about the possible lead and cadmium content of hay and grain crops grown in the area. Both cattle and wild game feed on these crops, also. We are also concerned about the safety of agricultural products grown for direct human consumption, as well.

These studies should involve the tribes in the area to insure uniformity with their concerns. Funding Sources include the BIA, Fish and Wildlife Service, EPA, and State of Oklahoma.

Conclusion:

The above issues have been developed by the Committee through the process of several meetings. Much of the information was provided by the Environmental Departments of several Tribes, as well as, concerned Native American Committee members. The Tribes and concerned Native Americans in the area have been considering these issues for some time. Their contributions are the result of several months of work prior to the creation of the Tar Creek Taskforce. Fortunately, the time frame for the production of this report was sufficient to put together these concerns. The second Task will require us to research these issues in greater detail and report on the studies needed to gather better information, and the possible funding sources for these studies.

It may be self evident to the reader that some things can be done for some of the issues mentioned without waiting until the end of the Taskforce process. The Committee welcomes any efforts that can be made to address these concerns as quickly as possible. We will gladly work with any agencies or individuals that may have ideas leading to solutions to some of these issues.

We wish to thank Governor Keating, Brian Griffin, J.D. Strong, and all the members of the Taskforce for the opportunity to be of service in this project. We offer our prayers that our work – together – will bring an end to this cycle of destruction, and bring a new time where all may enjoy the bounty of a clean and healthful Mother Farth.

Subcommittee Members:

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